

plates pierced each with six foramina; mouth and anus small, both central.

This genus is remarkable for the irregularity of form and size of the interambulacral plates, differing in this both from *Archæocidaris* and *Palæchinus*; from the former it also differs in the greater number of the interambulacral plates being destitute of the mammillated primary tubercle, and by its small size and lateral position on those plates which do bear it; from *Palæchinus* it differs, besides the above, in the two rows of primary tubercles to each interambulacrum, &c. I at present know but one species.

Perischodomus biserialis (M'Coy).

Sp. Char. Diameter (of flattened specimens) about $2\frac{1}{2}$ inches, width of ambulacra at middle 3 lines; width of mouth and ovarian circle each about 3 lines; granules on the five rows of irregular interambulacral plates scarcely visible, the two rows of mammillated and perforated primary tubercles bordering the ambulacra very small; two rows of ambulacral plates, about six or seven occupying the same space as one of the interambulacral plates of the middle of the row.

Some few of the ambulacral plates are wedge-shaped, pointed towards the interambulacra, as in the sketch. The primary spines, as far as seen, were cylindrical and smooth.

Rare in the lower carboniferous limestone of Hook Head, Wexford.

(Col. University of Cambridge (anal and genital half), and Dr. Griffith at Dublin (oral half).)

XXIX.—*Algæ Orientales*:—*Descriptions of new Species belonging to the genus Sargassum.* By R. K. GREVILLE, LL.D. &c.*

[Continued from p. 219.]

[With a Plate.]

16. *Sargassum squarrosus* (nob.); caule filiformi, angulato; foliis (parvis) anguste obovatis, obtusis, plus minusve repando-dentatis; vesiculis subsphæricis, brevissime petiolatis; receptaculis obovatis vel lineari-oblongis, plano-compressis, acute lateque dentatis.
Hab. in mari Peninsulæ Indiæ Orientalis; Wight.

Root I have not seen. *Stem* filiform, angular, a foot to, probably, a foot and a half long, bushy with numerous branches which appear to be generally 2 or 3 inches long. *Leaves* small, half an inch or, rarely, three-fourths of an inch in length,

* Read before the Botanical Society of Edinburgh, February 8, 1849.

narrow-obovate, rounded at the apex, attenuated at the base into a slender and rather long footstalk, often nearly entire, but more generally repando- or even serrato-dentate, furnished with pores, and a nerve which disappears before reaching the summit. *Vesicles* nearly the size of hempseed, subspherical, supported on stalks scarcely a line long. *Receptacles* a line or more in length, axillary, obovate, or oblong, compressed, the margin and apex furnished with broad sharp teeth; frequently the receptacles are proliferous, the whole forming a very irregularly divided raceme, which is sometimes so twisted and curled as to give it the appearance of a cluster of minute proliferous leaves.

From the two imperfect specimens which I possess of this plant, I suspect that it is subject to considerable variation, and my figure and description are given chiefly with a view of affording algologists a memorandum for its more accurate investigation. On one of my specimens several of the leaves are converted into vesicles, which are supported on stalks 2 lines long resembling the lower part of the leaf; these are also winged and apiculate.

17. *Sargassum divaricatum* (nob.); caule angulato; foliis linearibus, acuminatis, breviter petiolatis, uninervibus, subintegerrimis; vesiculis numerosis, sphaericis, petiolatis, petiolis planis, dilatatis; receptaculis cylindraceis, filiformibus, divaricato-dichotomis.

Wight in herb. no. 7.

Hab. in mari Peninsulæ Indiæ Orientalis; Wight.

Root I have not seen. Entire plant probably a foot or more in length. *Stem* nearly as thick as a crow-quill, giving off spreading branches at short intervals 4 to 6 inches long, which are clothed with numerous short ramuli and leaves, so as to give the whole plant a bushy appearance. *Leaves* somewhat more than an inch in length, a line or more broad, more or less acuminate, entire, or rarely obscurely subdentate, shortly petiolate, furnished with a nerve and pores. *Vesicles* spherical, smaller than hempseed, on little flat dilated petioles about a line long; sometimes they are margined, and occasionally on longer stalks resembling an abbreviated leaf, and apiculate. *Receptacles* filiform, cylindraceous, subdichotomously divided, the segments spreading, the whole forming axillary tufts, often 3 or 4 lines in length. *Colour* reddish brown, that of the receptacles black. *Substance* cartilaginous.

A well-marked species, the receptacles separating it at once from its congeners. When luxuriant the three or four tufts on a ramulus seem to form one mass, and to the naked eye suggest the idea of a little parasitic *Gigartina*, and is by no means unlike dwarf specimens of *Gymnogongrus Griffithsia*, Mart. Sometimes the receptacles are less abundant and conspicuous, having fewer

divisions, the segments however being often nearly 2 lines long. The leaves bear a considerable resemblance to those of *Sargassum bacciferum*, but are much more numerous.

18. *Sargassum acutifolium* (nob.); caule plano-compresso, distiche ramoso; foliis linearibus utrinque attenuatis, acutissimis, integerrimis, uninerviis, ad ramulos filiformibus; vesiculis sparsis, subellipticis, petiolatis, petiolis planis; receptaculis compressis, lineari-oblongis, ad apicem dentatis.

Sargassum acinaria, Ag. Sp. Alg. vol. i. p. 22??

Hab. in mari Peninsulæ Indiæ Orientalis; Wight.

Root I have not seen. Plant probably 2 or 3 feet long. *Stem* (or probably primary branch) plano-compressed, a line or more broad, distichously branched; branches about an inch apart, 8–12 inches long, flat like the stem, bearing ramuli 2–3 inches long, at intervals of $\frac{1}{2}$ to $\frac{1}{3}$ of an inch, which in their turn bear a smaller series upon which the fructification is placed. *Leaves*, the larger ones at the base of the branches, 2 inches in length, linear, acuminate at each extremity, entire, furnished with a nerve and a few scattered pores: the rest much smaller, almost filiform, those accompanying the fructification sometimes so slender as to be capillary. *Vesicles* scarcely half the size of hempseed, very sparingly developed, somewhat elliptical, on flat slender stalks, 2 lines or more long, mostly produced at the base of the racemes of receptacles. Sometimes a vesicle occurs at the extremity of a leaf. *Receptacles* minute, axillary, oblong or linear-oblong, compressed, generally toothed at the apex, forming more or less divided racemes. *Colour* reddish black. *Substance* cartilaginous.

It is not without considerable hesitation that I separate this plant from *Sargassum acinaria* of Agardh. There are however differences, judging from his description, (and in the absence of authenticated specimens,) which seem to be sufficiently decisive. The stem in *S. acinaria* is said to be angular. In the specimens before me both it and the branches are clearly plano-compressed, and give off the ramifications in a distichous manner. This character alone would remove my plant from the species above mentioned. The receptacles, described simply as cylindraceous in *S. acinaria*, are in the present plant, when fully developed, more or less compressed, and toothed at the apex. The cauline leaves are not "lanceolate," being too narrow to be termed even linear-lanceolate; but this is a character so liable to variation that much stress cannot be laid upon it. The racemes of fructification are truly axillary. The vesicles (in the specimens under examination) very few. *Sargassum acutifolium* is, from the abundance of the narrow leaves (which spread at a considerable angle), and also of the closely approximated tufts of

receptacles, very bushy in appearance. My specimens are not more than 14 inches long, but evidently indicate a plant 2 or 3 feet in length.

EXPLANATION OF PLATE X.

Sargassum squarrosum.

- Fig. 1. A branch.
 — 2. Leaves.
 — 3. Vesicles.
 — 4. Receptacles. The last magnified.

Sargassum divaricatum.

- Fig. 1. One of the ramuli.
 — 2. Vesicles.
 — 3. Do.
 — 4. Receptacles. 3 & 4 magnified.

Sargassum acutifolium.

- Fig. 1. A small branch.
 — 2. Do. from a young plant.
 — 3. Vesicles.
 — 4. Do. produced at the end of leaves.
 — 5. A raceme.
 — 6. A single receptacle. 5 & 6 magnified.

XXX.—*Descriptions of two new Birds from Jamaica.*

By PHILIP HENRY GOSSE.

THE former of the two species which I am about to describe was accidentally overlooked in writing my 'Birds of Jamaica,' and the latter has been discovered since the publication of that work.

Elania cotta. Length $5\frac{1}{2}$ inches, expanse of wing $8\frac{6}{10}$, flexure $2\frac{6}{10}$, rictus $\frac{1}{2}\frac{5}{0}$, tarsus $\frac{8}{10}$, middle toe $\frac{6}{10}$. Irides dark hazel; feet dark slate-gray; beak black. Head blackish ash; crown brilliant yellow, commonly concealed; back and rump olive; tail blackish with olive edges; wing black; the primaries edged faintly, the secondaries, tertiaries and greater coverts conspicuously, with pale yellow; third quill longest. A white stripe, ill-defined, over the eye, meeting on the forehead; ear-coverts white, with dark tips; chin, cheeks, throat, and breast white, speckled obscurely with black beneath the eyes; belly, vent, under tail-coverts, and inner surface of wings, delicate pale yellow.

This little Tyrant, for want of any obvious peculiarities to distinguish it from others of its genus, I have named from the locality where I first met with it, the Cotta-wood, a tangled cop-pice on Grand Vale Mountain, in the parish of St. Elizabeth. I afterwards observed it in other situations, as in the woods around Bluefields, but it does not appear to be anywhere common: nor am I able to say whether it is a permanent resident, or merely a